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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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LERNER GREENBERG STEMER LLP			MURPHY, RHONDA L	
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HOLLYWOOD, FL 33022-2480			PAPER NUMBER	
			2616	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/021,705

Applicant(s)

WENDORFF, WILHARD VON

Examiner

Rhonda Murphy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-63 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 12-22, 27-38, 43-55 and 60-63 is/are rejected.
- 7) ☒ Claim(s) 8-11, 23-26, 39-42 and 56-59 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/31/02</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

1. Claims 13, 28, 44 and 61 are objected to because of the following informalities:
Regarding the first and second receivers, line 3 recites an input connected to said "second" communication channel and line 7 recites an input connected to said "first" communication channel. Examiner is questioning whether applicant intended to recite "first" communication channel in line 3 and "second" communication channel in line 7. Appropriate correction is required.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 7, 12 – 14, 31, 34, 35, 43 – 47, 50, 51, 55, 60 – 63 are rejected under 35 U.S.C. 102(e) as being anticipated by Shiragaki et al. (US 6,657,952).

Regarding claim 1, Shiragaki teaches a communication system, comprising: a plurality of transceivers (Figs. 1 & 2; nodes 105-108); a communication bus connected to said plurality of said transceivers to enable transmission of communication information between individual ones of said plurality of said transceivers (see Fig. 1); said

communication bus having a ring-shaped structure connecting each one of said plurality of said transceivers to a respective one of said plurality of said transceivers that is adjacent in a clockwise direction, defined as a respective clockwise adjacent transceiver, and to a respective one of said plurality of said transceivers that is adjacent in a counterclockwise direction, defined as a respective counterclockwise adjacent transceiver (col. 4, lines 51-60); said communication bus having a plurality of bus sections defining a plurality of first bus sections and a plurality of second bus sections (see Fig. 1; bus sections between nodes); each one of said plurality of said transceivers being connected to said respective clockwise adjacent transceiver via a respective one of plurality of said first bus sections (see Fig. 1; bus sections between nodes); each one of said plurality of said transceivers being connected to said respective counterclockwise adjacent transceiver via a respective one of said plurality of said second bus sections (see Fig. 1; bus sections between nodes); each one of said plurality of said transceivers including a first receiver (Fig. 2; ingress line 101 at ADM 209) and a first transmitter (Fig. 2; egress line 101 at ADM 209) that are associated with a respective one of said plurality of said first bus sections; each one of said plurality of said transceivers including a second receiver (ingress line 102 at ADM 210) and a second transmitter (egress line 102 at ADM 210) that are associated with a respective one of said plurality of said second bus sections; each one of said plurality of said transceivers including a control device (see Fig. 2; monitor 215 coupled to switches 211-214) for controlling said first receiver of said one of said plurality of said transceivers, said second receiver of said one of said plurality of said transceivers (see

Fig. 2; col. 5, lines 39-50), said first transmitter of said one of said plurality of said transceivers, and said second transmitter of said one of said plurality of said transceivers (see Fig. 2; col. 5, lines 39-50); said control device being constructed to activate said first transmitter for transmitting first ones of the communication information in the clockwise direction via said communication bus (col. 5, lines 51-64); and said control device being constructed to activate said second transmitter for transmitting second ones of the communication information in the counterclockwise direction via said communication bus (col. 5, lines 51-64).

Regarding claims 7 and 55, Shiragaki teaches a system wherein said control device is constructed such that, when an operation is being performed that is selected from the group consisting of transmitting the communication information and forwarding the communication information, said control device checks for an error and if the error is found, said control device, after a given delay time, causes an operation to be performed that is selected from the group consisting of retransmitting the communication information and forwarding the communication information via a transmitter that is selected from the group consisting of said first transmitter and said second transmitter (col. 6, lines 1-15).

Regarding claims 12, 43 and 60, Shiragaki teaches said communication bus including a first communication channel for exclusively transmitting the communication information in the clockwise direction; and said communication bus includes a second communication channel for exclusively transmitting the communication information in the counterclockwise direction (col. 4, lines 51-60).

Regarding claims 13, 44 and 61, Shiragaki teaches said first receiver of each one of said plurality of said transceivers having an input connected to said first communication channel of said plurality of said first bus sections (Fig 2, line 101 entering 300); said second receiver of each one of said plurality of said transceivers having an input connected to said second communication channel of said plurality of said second bus sections (line 102 entering 300'); said first transmitter of each one of said plurality of said transceivers having an output connected to said first communication channel of said plurality of said first bus sections (line 101 exiting 307); and said second transmitter of each one of said plurality of said transceivers having an output connected to said second communication channel of said plurality of said second bus sections (line 102 exiting 307').

Regarding claim 14, Shiragaki teaches the control device constructed to activate said first transmitter to transmit the first ones of the communication information in the clockwise direction via said first communication channel (col. 5, lines 51-64); and said control device is constructed to activate said second transmitter to transmit the second ones of the communication information in the counterclockwise direction via said second communication channel (col. 5, lines 51-64).

Regarding claim 31, Shiragaki teaches the same limitations described above in the rejection of claim 1. Shiragaki further teaches a control device constructed such that, when an operation is being performed that is selected from the group consisting of transmitting the communication information and forwarding the communication information, said control device checks for an error and if the error is found, said control

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device, after a given delay time, causes an operation to be performed that is selected from the group consisting of retransmitting the communication information and forwarding the communication information via a transmitter that is selected from the group consisting of said first transmitter and said second transmitter (col. 6, lines 1-15).

Regarding claims 34, 45, 50 and 62, Shiragaki teaches said control device constructed to activate said first transmitter to transmit given ones of the communication information in the clockwise direction via said communication bus (col. 5, lines 51-64); and said control device constructed to activate said second transmitter to transmit given ones of the communication information in the counterclockwise direction via said communication bus (col. 5, lines 51-64).

Regarding claims 35, 46, 51 and 63, Shiragaki teaches said control device constructed to activate said first transmitter to transmit first ones of the communication information in the clockwise direction via said communication bus (col. 5, lines 51-64); and said control device constructed to activate said second transmitter to transmit first ones of the communication information in the counterclockwise direction via said communication bus (col. 5, lines 51-64).

Regarding claim 47, Shiragaki teaches the same limitations described above in the rejection of claim 1. Shiragaki further teaches a control device being constructed to identify faulty communication information and to forward the identified faulty communication information (col. 6, lines 1-15).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2 – 4, 32 – 33, 36, 48 – 49, 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiragaki et al. (US 6,657,952).

Regarding claims 2, 32 and 48, Shiragaki teaches a system wherein said control device activates the transmitters and receivers. Shiragaki fails to explicitly disclose of each one of said plurality of said transceivers constructed such that, when the first ones of the communication information and the second ones of the communication information are not being transmitted by the one of said plurality of said transceivers, said control device activates said first receiver and said second receiver.

However, it would have been obvious to one skilled in the art to provide a control device that will activate the first and second receiver when information is not transmitted, so as to allow information to be received at the transceiver.

Regarding claims 3, 33 and 49, Shiragaki teaches a system wherein said control device activates the transmitters and receivers. Shiragaki fails to explicitly disclose each one of said plurality of said transceivers is constructed such that, when ones of the communication information not intended for said one of said plurality of said transceivers is received by a receiver selected from the group consisting of said first

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receiver and said second receiver, said control device activates a transmitter selected from the group consisting of said first transmitter and said second transmitter.

However, it would have been obvious to one skilled in the art to provide a control device that will activate the first or second transmitter when information is not intended to be received by the transceiver, so as to allow information to be transmitted by the transceiver.

Regarding claims 4, 36 and 52, Shiragaki teaches a system wherein said control device activates the transmitters and receivers. Shiragaki fails to explicitly disclose each one of said plurality of said transceivers constructed such that, when a communication information not intended for said one of said plurality of said transceivers is received by a receiver selected from the group consisting of said first receiver and said second receiver, then: said control device activates a given transmitter, selected from the group consisting of said first transmitter and said second transmitter, only if no communication information is currently being received via one of said plurality of said bus sections associated with said given transmitter.

However, it would have been obvious to one skilled in the art to realize when information is not being received, a transmitter will be activated when no information is being received on the bus section associated with the given transmitter, so as to allow the transceiver to transmit information on that particular bus section.

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5. Claims 5 – 6, 15 – 22, 27 – 30, 37- 38, 53 - 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiragaki et al. (US 6,657,952) in view of Yim (US 2003/0206527).

Regarding claims 5, 37 and 53, Shiragaki teaches a system wherein each one of said plurality of said transceivers transmit and forward information. Although it would be obvious for a storage device to exist when transmitting/receiving information through transceivers, Shiragaki fails to explicitly disclose a storage device for storing communication information that is defined as stored communication information and that is selected from the group consisting of information to be transmitted and information to be forwarded.

However, Yim disclose a storage device for storing information to be transmitted and forwarded (buffers 26 and 27 within node 17; page 6, paragraph 111).

In view of this, it would have been obvious to one skilled in the art to modify Shiragaki's system by including Yim's storage device, for the purpose of maintaining the information that is transmitted and received by the transceiver.

Regarding claims 6, 38 and 54, Shiragaki teaches a system wherein said control device activates the transmitter and receiver, however fails to explicitly disclose a storage device.

Yim teaches a control device constructed such that, if ones of the communication information are currently being received via said respective one of said plurality of said first bus sections and if said first transmitter is to be activated, then after a predetermined delay time, the stored communication information is read out from said

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storage device and is attempted to be forwarded via said respective one of said plurality of said first bus sections; and said control device is constructed such that, if ones of the communication information are currently being received via said respective one of said plurality of said second bus sections and if said second transmitter is to be activated, then after a predetermined delay time, the stored communication information is read out from said storage device and is attempted to be forwarded via said respective one of said plurality of said second bus sections (page 6, paragraphs 111-112).

In view of this, it would have been obvious to one skilled in the art to modify Shiragaki's system by including Yim's storage device for reading out information after a specified period of time, so as to forward data held in the storage device and avoid system delay and congestion.

Regarding claim 15, Shiragaki teaches the same limitations described above in the rejection of claim 1. Shiragaki fails to explicitly disclose a storage device.

However, Yim teaches each one of said plurality of said transceivers including a storage device for storing stored communication information selected from the group consisting of information to be transmitted to another one of said plurality of said transceivers and information to be forwarded to another one of said plurality of said transceivers (buffers 26 and 27 within node 17; page 6, paragraph 111).

In view of this, it would have been obvious to one skilled in the art to modify Shiragaki's system by including Yim's storage device, for the purpose of maintaining the information that is transmitted and received by the transceiver.

Regarding claim 16, Shiragaki teaches the same limitations described above in the rejection of claim 2.

Regarding claim 17, Shiragaki teaches the same limitations described above in the rejection of claim 3.

Regarding claims 18 and 29, Shiragaki teaches said control device constructed to activate said first transmitter to transmit given ones of the communication information in the clockwise direction via said communication bus (col. 5, lines 51-64); and said control device constructed to activate said second transmitter to transmit given ones of the communication information in the counterclockwise direction via said communication bus (col. 5, lines 51-64).

Regarding claims 19 and 30, Shiragaki teaches said control device constructed to activate said first transmitter to transmit first ones of the communication information in the clockwise direction via said communication bus (col. 5, lines 51-64); and said control device constructed to activate said second transmitter to transmit first ones of the communication information in the counterclockwise direction via said communication bus (col. 5, lines 51-64).

Regarding claim 20, Shiragaki teaches the same limitations described above in the rejection of claim 4.

Regarding claim 21, Shiragaki teaches the same limitations described above in the rejection of claim 6.

Regarding claim 22, Shiragaki teaches the same limitations described above in the rejection of claim 7.

Regarding claim 27, Shiragaki teaches the same limitations described above in the rejection of claim 12.

Regarding claim 28, Shiragaki teaches the same limitations described above in the rejection of claim 13.

Allowable Subject Matter

6. Claims 8 – 11, 23 – 26, 39 – 42 and 56 – 59 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent 4,850,043 to Winston, US Patent 5,218,604 to Sosnosky, and US Patent 4,554,659 to Blood et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rhonda Murphy whose telephone number is (571) 272-3185. The examiner can normally be reached on Monday - Friday 8:00 - 4:30pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Rhonda Murphy
Examiner
Art Unit 2616

RM



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